ABSTRACT OF THE DISCLOSURE

The invention relates to a method for determining the position x_p of a peak of a pulse in a signal received at a receiver. In order to improve the accuracy of this determination, the method comprises taking samples of said received signal, determining at least three samples, at least one of which has a signal strength exceeding a threshold value, and determining the position x_p of the pulse peak based on an interpolation of at least two of the determined samples, which at least two samples are selected based on the signal strengths of the at least three determined samples, and which interpolation includes an evaluation of the signal strength of the at least two samples. The invention relates equally to a device and to a cellular communication system comprising means for realizing this method.